

### **REMARKS**

Claims 1-12 and 15-32 are pending in this application. By this Amendment, claims 1, 5, 15, 16, 18 and 22 are amended, claims 13-14 are cancelled, and claims 31-32 are added.

Claims 1 and 18 are amended to include features of claim 14, claims 15 and 16 are amended to depend from claim 1, and claims 5 and 22 are amended to end with a period.

Support for new claims 31 and 32 can be found, for example, at page 34, lines 2-21 of the originally filed specification.

No new matter is added.

#### **I. Claim Rejections Under 35 U.S.C. § 103**

##### **A. Mitsunaga in view of Dick and Hiraishi: Claims 1-17**

The Examiner has rejected claims 1-17 under 35 U.S.C. § 103(a) as being unpatentable over Mitsunaga (JP 2001-323149) in view of Dick (U.S. Patent No. 4,722,955) and Hiraishi (U.S. Patent Application Publication No. 2003/0156238). Applicants respectfully traverse this rejection.

Claim 1 recites a direct backlight liquid crystal device comprising “a light diffusion sheet which has a protective film on a surface thereof which faces the backlight source or on both surfaces thereof as desired”; “the light diffusion sheet is formed from a composition comprising...(D) 0 to 0.5 parts by weight of ultraviolet absorber (component D), and...(F) less than 0.001 parts by weight of hindered phenol compound (compound F)”; and “wherein the protective film is an organic polymer film containing 0.1 to 50 wt% of ultraviolet absorber (component D<sup>p</sup>) and having a thickness of 0.1 to 500 μm.” Mitsunaga, Dick and Hiraishi do not teach or suggest these claimed features.

Mitsunaga does not teach or suggest that the light diffusion sheet is formed from a composition comprising 0 to 0.5 parts by weight of ultraviolet absorber (component D), and wherein the protective film is an organic polymer film containing 0.1 to 50 wt% of ultraviolet absorber (component D<sup>p</sup>) and having a thickness of 0.1 to 500 μm. In addition, Mitsunaga does not teach or suggest that the light diffusion sheet is formed from a composition comprising 0.01 to 0.5 parts by weight of ultraviolet absorber (component D), as recited in new claim 31.

Accordingly, Mitsunaga does not teach or suggest a protective film and a distribution of ultraviolet absorber between the light diffusion sheet and the protective film.

As the table below, which is an extract of Table 4 in the specification, shows, a light diffusion sheet that has a protective film (Examples 20, 21 and 22) has good weather resistance compared to a light diffusion sheet that does not have a protective film (Example 19).

More particularly, a light diffusion sheet having a protective film has excellent  $\Delta YI$  in comparison with a light diffusion sheet without a protective film.

Furthermore, a light diffusion sheet having a protective film (Exs. 20, 21 and 22) has the same level of brightness as a light diffusion sheet that does not have a protective film (Ex. 19).

Accordingly, a light diffusion sheet having a protective film shows unexpected results in terms of better weather resistance while at the same time maintaining a high level of brightness.

	Unit	Ex. 19	Ex. 20	Ex. 21	Ex. 22
<b>Protective Film</b>	<b>Kind</b>		<b>Coating A</b>	<b>Film B</b>	<b>Coating Layer C</b>
<b>Average Brightness</b>	<b>cd/m<sup>2</sup></b>	<b>5690</b>	<b>5680</b>	<b>5680</b>	<b>5680</b>
<b>Total Light Transmittance</b>	<b>%T</b>	<b>55</b>	<b>56</b>	<b>55</b>	<b>56</b>
<b>Diffusibility</b>	<b>°</b>	<b>47</b>	<b>47</b>	<b>47</b>	<b>47</b>
<b>Initial YI</b>	<b>-</b>	<b>4.4</b>	<b>4.7</b>	<b>4.7</b>	<b>4.7</b>
<b>YI after 250hr-Initial YI (= <math>\Delta YI</math>)</b>	<b>-</b>	<b>4.1</b>	<b>0.5</b>	<b>0.4</b>	<b>0.5</b>

Extract from Table 4

Mitsunaga merely discloses a light diffusible aromatic polycarbonate resin composition that could be possibly blended with a conventional additive agent such as an ultraviolet ray absorbant, which is preferred for use outdoors or a strong light source. See Mitsunaga translation at paragraphs [0068] and [0072]. Mitsunaga does not teach or suggest the use of a protective film and a distribution of ultraviolet light absorber between the light diffusion sheet and the protective film, and does not teach the unexpected advantages in terms of weather resistance and brightness. Accordingly, one of ordinary skill in the art would not have developed the direct backlight type liquid crystal device of claim 1 from the disclosure of Mitsunaga.

In addition, in the Final Rejection the Examiner acknowledges that Mitsunaga does not teach “less than 0.001 parts by weight of hindered phenol compound (compound F),” as claimed. See July 17, 2008 Final Rejection, page 3, lines 3-4.

However, the rejection states that Dick teaches that the presence of a hindered phenol does not necessarily provide the color stability in certain environments and is optional, thus recognizing that there are instances where a hindered phenol compound is omitted for the purpose of providing the desired color stability in hot and humid environments.

Dick would not have motivated one of ordinary skill in the art to use little or no phenolic compounds to improve brightness. In fact, Dick specifies hindered phenolic compounds as an optional compound in claim 1, and states that “Representative hindered phenolic compounds which are useful herein” (column 3, lines 12-13). Thus, hindered phenolic compounds are useful in the invention of Dick while the present claims require little or no such phenolic compounds.

In the Advisory Action, the Examiner asserts that Dick teaches a primary example that does not contain any hindered phenolic compounds and recognizes that hindered phenolic compounds can be omitted.

Applicants do not dispute that Dick recognizes that hindered phenolic compounds can be omitted, as they are “optional.” However, one of ordinary skill in the art would have been motivated to use hindered phenolic compounds in view of Dick, because Dick specifically claims them, and provides at least ten specific examples. See Dick, col. 3, lines 11-31.

Thus, one of ordinary skill in the art would have had no reason or rationale to have developed a direct backlight type liquid crystal device comprising a light diffusion sheet that is formed from a composition comprising “less than 0.001 parts by weight of hindered phenol compound (compound F),” as claimed, in view of Dick.

Furthermore, with respect to brightness, in the Advisory Action the Examiner asserts that brightness in terms of  $\text{cd/m}^2$  is not recited in the claims, and the fact that Applicant has recognized another advantage which would flow naturally from following the suggestion of the

prior art cannot be the basis for patentability when the differences would otherwise be obvious.

See Advisory Action, page 3, lines 12-21.

However, as discussed above with reference to the Table, a light diffusion sheet having a protective film shows unexpected results in terms of better weather resistance while at the same time maintaining a high level of brightness.

The units ( $\text{cd/m}^2$ ) of brightness would not need to be recited in the claims, because brightness relates to the protective film, and the protective film is recited in the claims.

In addition, the unexpected results in terms of better weather resistance while at the same time maintaining a high level of brightness would not naturally flow from the references because they do not teach or suggest a protective film and a distribution of ultraviolet absorber between the light diffusion sheet and the protective film.

Furthermore, in the Final Rejection the Examiner acknowledges that Mitsunaga fails to specify the type of liquid crystal device and, thus, fails to teach a direct backlight type liquid crystal device.

However, in the Final Rejection the Examiner asserts that Hiraishi teaches a direct backlight type liquid crystal device comprising a backlight source, a liquid crystal panel and a light ray film utilizes a light diffusion sheet formed from a composition that contains an ultraviolet light absorber for stability. Applicants respectfully disagree.

As discussed above with reference to the Table, a light diffusion sheet having a protective film shows unexpected results in terms of better weather resistance while at the same time maintaining a high level of brightness. Because Hiraishi does not teach or suggest this concept, Hiraishi does not provide any reason or rationale for one of ordinary skill in the art to have combined its backlight type crystal device with Mitsunaga.

In view of the above remarks, claim 1 would not have been rendered obvious by Mitsunaga in view of Dick and Hiraishi. Claims 2-12, 15-17 and new claim 31 depend from claim 1 and, thus, also would not have been rendered obvious by Mitsunaga in view of Dick and Hiraishi. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**B. Mitsunaga in view of Dick: Claims 18-30**

The Examiner has rejected claims 18-30 under 35 U.S.C. § 103(a) as being unpatentable over Mitsunaga in view of Dick. Applicants respectfully traverse the rejection.

As discussed above, the light diffusion sheet of claim 1 shows unexpected results in terms of better weather resistance while at the same time maintaining a high level of brightness, and Dick would not have motivated one of ordinary skill in the art to use little or no phenolic compounds to improve brightness.

By this Amendment, claim 18 recites the light diffusion sheet that is recited in claim 1. As a result, claim 18 also would not have been rendered obvious by Mitsunaga in view of Dick. Claims 19-30 and new claim 32 depend from claim 18 and, thus, would not have been rendered obvious by Mitsunaga in view of Dick. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

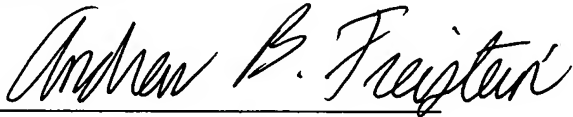
**III. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-12 and 15-32 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place the application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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